Influences on Substance Use in Alaska

Significant Risk and Protective Factors Influencing
adolescent substance use and their Indicators

Submitted to
Alaska Division of Behavioral Health
by
State Behavioral Health Epidemiology Workgroup

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Report may be download at *http://hss.state.ak.us/dbh/prevention/publications/*
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Influences on Substance Use in Alaska

Extensive national research spanning over fifty years[1-30] has demonstrated a strong association between specific social conditions, personal experiences and the use of tobacco, alcohol and other drugs in adolescence. Most states track substance use by monitoring data on tobacco, alcohol and other drug consumption (e.g. 30 day use, binge use, ever use) or the consequences of use (e.g. drinking driving crashes, hospital visits, school suspensions.) Instead of tracking *consumption* and *consequence* data exclusively, Alaska must monitor research-based *influences that impact* substance use, as well. The more protective factors are increased (and risk factors reduced) the more likely substance abuse and suicide can be prevented. The priority influences on *adolescent* substance use are as follows (definitions and citations may be found on pages 4-6.)

Priority Factors	Alaska Data
Protective Factor Indicators	**Protective Indicators with Baseline Data**
Connection to Family	*Developmental Indicator Stage I*
Connection to School	33.4% of students agree that their school has a positive climate 9.5% of students are connected to their school SCCS 2007
Positive Connection to *Other* Adults	87% of students have a positive connection with at least *one other* adult outside of their home. YRBS 2007
Engagement in Meaningful Activities	51% of students are involved in volunteer and helping activities one or more times per week. YRBS 2007
Social, Emotional and Employability Skills	28.3% of students report they have social, emotional and employability skills. SCCS 2007
Cultural Identity	*Developmental Indicator Stage I* *(Loss of cultural identity can be a risk factor, see below)*
Risk Factor Indicators	**Risk Indicators with Baseline Data**
Experienced child abuse (neglect, physical, sexual abuse)	Alaska children are abused or neglected at a substantiated rate of 24.5 cases per 1,000 children, ages 0-17. OCS new database 2007 Family violence rate: *Developmental Indicator Stage II*
Early initiation of substances	20.4% of students have used alcohol before the age of 13. YRBS 2007
Death by suicide of a family member	20.6 suicides were completed per 100,000 Alaskans BVS 2007 Death rate of family members by suicide: Developmental Stage II
Availability of alcohol and other drugs	*Developmental Indicator Stage II*
Community norms and laws related to alcohol, drug use	*Developmental Indicator Stage II*
Loss of Cultural Identity	*Developmental Indicator Stage I*

Developmental stage I: *Indicator needs to be defined and measurement system put into place*
Developmental stage II: *Potential indicator in place, existing data system needs further support and refinement*

Note: The risk and protective factor indicators are state and population-based; the data may not be available for individual communities. Indictors may be modified for prevention programs and services, as performance measures.

Influences of Substance Abuse in Alaska

Scope of project

In 2006 a State Epidemiological Outcomes Workgroup (SEOW) was created to collect, analyze, and report substance use incidence, prevalence and other related data. An "influences subcommittee" was created to: 1) identify and prioritize the factors that influence substance use and abuse, and 2) identify existing and recommend new indicators to monitor over time.

Process: The "influences subcommittee" began with the adolescent population while recognizing the significant need to look at younger and older populations as well. The risk and protective factor national research for adolescent substance use (and other risk behaviors) provided the working foundation. Additional factors were considered that had a strong research base of support. The priority factors were selected based on: 1) strength of the research; 2) relevance to Alaska; and 3) ability of a community /state partnerships to change that factor. To assure a comprehensive review, we examined factors across the social domains (family, community, school, and individual.) The availability of the data did not exclude a factor if it was considered to be of major significance to the Alaska population. For example, poverty is highly correlated with substance abuse, but not easily amenable to change.

Through this process five protective factors and five risk factors were prioritized. In addition, cultural identity or loss of culture was selected as factor that has tremendous influence on one's sense of self and subsequent behavior. Next the group turned to identifying population-based indicators for each of the selected factors. This process was divided into 1) factors with existing indicators and data; 2) factors with *some* indicators, but not reliable data at this point data; 3) factors that remain of high significance without indicators or data, at this time.

The *Influences on Substance Abuse in Alaska* was further reviewed by the data analyst for the Division of Behavioral Health as well as the full State Epidemiological Outcomes Workgroup.

This report is comprised of baseline data for the priority factors and their indicators. Three factors (family violence, availability of alcohol, community norms and laws) have indicators needing further refinement and/or support for data collection. Two factors (connection to family, cultural identity) do not have indicators at this time. The subcommittee urges the state to partner with interested organizations to further define indicators and develop accurate measurement tools for both of these factors.

Although the indicators are population-based Alaska measures, they are not meant to take precedent over community or program-based measures. This is important to note so that community planning efforts to deliver programs and services continue to be community-driven. The identified indicators reflect the need for a consistent source of population-based data that can be monitored over time across Alaska. Other community and program-based indicators continue to be developed and provide further support for advancing our efforts for data collection and evaluation in Alaska.

As noted previously, while the risk and protective factors identified in this report are based on research for adolescent substance use, many of the factors have implications for adult and older populations as well. A review of the literature was not conducted specifically for adults and may need additional scrutiny and peer review to determine both the availability and reliability of the research. Research on loss of culture and cultural identity was more thoroughly reviewed to apply across the lifespan, to children, youth and adults, and is cited here. Unfortunately, indicators in this area were difficult to locate, although promising as new measures are being developed.

In closing, two studies [7, 30] found the presence of both protective factors: family support and school support in adolescents who have been physically abused, will reduce the likelihood of suicide attempts more than the mere removal of the risk factor of substance use (e.g. alcohol, drugs) regardless of gender. While communities must continue to reduce the factors that put children at risk, these studies point to the powerful impact protective factors can play in helping children cope with life experiences, they have no control over.

Risk and Protective Factor Definitions and their Indicators

The definition for each factor is derived from its research. Indicators are based on existing Alaska data sources that best match the definition. Some indicators are in a "developmental" stage, they have yet to be formalized. A brief summary of the developmental stage is offered.

Indicators of Protection

Connection to Family (bonding) - Family connectedness has several components. Connectedness refers to the feelings of warmth, love and caring children get from their parents. Children who feel support and connection report a high degree of closeness, feelings of being understood, loved, and wanted. A parental presence is related to connection; it refers to a parent being present during key times: before school, after school, dinner, bedtime and doing activities together. A "*positive parenting style"* involves high expectations, clear family rules, fair and consistent discipline practices and age appropriate supervision and monitoring of behavior, friends and whereabouts. The Add-Health study found this to be one of the strongest protective factors against all risk behaviors. [1,4,6,8,7,8,11,15, 21, 25]
Indicator Developmental Stage I: Indicator needs to be defined and measurement system put into place.
Status: Alaska does not collect population-based data related to parent/family connectedness. Indicators for this protective factor include: percent of families that - engage in regular routines (i.e. eating dinner together); participate in activities together; discuss current events/activities; or monitor children's behavior and set rules. Recommendation: The subcommittee urges the state to partner with interested organizations to further define family connectedness and develop indicators and measurement tools.

Connection to School - Students feel "connected" (attached or bonded) to their school based on their feelings about the people at school, both staff and other students. School connectedness is closely related to a caring positive school climate. School connectedness protects adolescents against many health risks, including smoking, alcohol, drug use, and early sexual initiation. Positive school climate and connectedness have been shown to contribute positively to academic achievement. [1,6,8,9,10,15,22 26]
Two Indicators: Percent of students agreeing that their school has a positive climate and percent of students that report being connected to their school. Data source: School Climate and Connectedness Survey 2007. (AASB)

Positive Connection to *Other* Adults - This factor refers to the student's perception that they *receive* support and caring in relationships with adults, other than family members i.e. neighbors, coaches, teachers, mentors or ministers. As children grow, they become involved in an expanded network of significant relationships. This enlarged network includes many adults who can provide regular contact, mentoring, support, and guidance. [1,3,4,5,9,10,11,13a,14, 21,25]
Indicator: Percent of students who have a positive connection with at least *one other* adult outside of their home.
Data source: Youth Risk Behavior Survey 2007 (DEED/DHSS)

Engagement in Meaningful Activities - This refers to activities involving volunteering and helping others in community or peer-based programs, or service-learning projects. This protective factor is associated with the reduction of several risk-taking behaviors (alcohol, tobacco or drug use, delinquency, anti-social behaviors, teen pregnancy, school suspensions or school drop-out. Programs increase skills and positive development when youth are involved in all phases: planning, organizing, implementation and evaluation. [2,3,4,6,7,6,8,9,11,15, 25, 28, 27,29]
Indicator: Percentage of students are involved in volunteer and helping activities one or more times per week.
Data source: Alaska Youth Risk Behavior Survey 2007 (DEED/DHSS)

Social, Emotional and Employability Skills - This refers to the abilities that equip young people to make positive choices, maintain healthy relationships and succeed in life; the skills include: communication, conflict resolution, empathy, resistance, problem solving/decision making and cultural competence. [3,4,5,8,9,11]
Indicator: Percent of students who report they have social, emotional and employability skills.
Data source: School Climate and Connectedness Survey 2007 (AASB)

Indictors of Risk

Experienced Child Abuse (neglect, physical, sexual) or other family violence - Research suggests that children or youth who have been physically abused or neglected are more likely than others to commit violent crimes and/or become pregnant. Exposure to high levels of marital and family discord or conflict also appears to increase risk, as does antisocial or delinquent behavior by siblings and peers. [1,6,11,17,20]
Child Abuse Indicator Rate of substantiated child abuse and neglect per 1,000 children ages 0-17.

Definitions (continued)

Experienced Child Abuse (neglect, physical, sexual) or other family violence (continued)

Family Violence Indicator Developmental Stage II: Existing measurement system needs further support and refinement. Status: The reporting of interpersonal violence remains incomplete. Victim services data, from the Council on Domestic Violence and Sexual Assault (CDVSA), is not representative of all incidents of family violence--only those who seek services. The CDVSA 2006 Annual Report identifies victim services data by total number, type of services (including age, gender and incident types) and by region. Recommendation: This indicator may become more representative if data collected from women's shelters and crisis centers are aggregated along with domestic violence reports from police and law enforcement records. This would not account for many rural and remote areas where there is no law enforcement or no reporting methods designed to collect this information. Furthermore, the addition of standardized questions about interpersonal violence to existing population-based surveys (e.g. PRAMS, YRBS, BHRFS) will enhance the development of a reliable indicator.

Early Initiation of Substances - The earlier young people begin using drugs, committing crimes, engaging in violent activity, dropping out of school and becoming sexually active, the greater the likelihood that they will have problems with these behaviors later on. For example, research shows that young people who initiate drug use before the age of 15 are at twice the risk of having drug problems as those who wait until after the age of 19. [6,8,18]
Indicator: Percent of students that have used alcohol before the age of 13. Data Source: Youth Risk Behavior Survey 2007(DHSS)

Availability of Alcohol and other Drugs - The more available alcohol and other drugs are in a community, the higher the risk that young people will use and abuse these substances. The perceived availability of drugs is also associated with greater risk of use. In schools where students believe drugs are more available, a higher rate of drug use occurs. [8,12,18]
Indicator Developmental Stage II: Existing measurement system needs further support and refinement.
Status: The Office of Public Safety, Alcoholic Beverage Control Board (ABC) conducts ongoing compliance checks (of sales to minors) of package stores, bars, lounges and restaurants across Alaska. The ABC board also collects data related to failure rates, but it has not consistently tracked this information until 2007. Recommendation: The data needs further analysis and the system of compliance checks needs additional support. *Other indicators related to access may need to be considered as well.*

Family History of Suicide or Attempts – Youth who have a suicide among any family member in the past 12 months are at greater risk for attempting suicide. [1,7,11]
Indicator: Completed suicide rate per 100,000 Alaskans (all ages) based on 2000-2004 data.
Data Source: Alaska Bureau of Vital Statistics, February 2007
Death rate of family members by suicide Indicator: Developmental Stage II. Vital Statistics is beginning to analyze mortality data and familial relationships.

Community Norms and Laws related to Alcohol and Drug Use - Community norms (the attitudes and policies a community holds about alcohol/drug use) are communicated in a variety of ways: through laws and written policies, informal social practices, and through the expectations parents and community members have of young people. (e.g. alcohol taxes, local option or drunk driving laws, perceptions of disapproval) [8,11,12,18]
Indicator Developmental Stage II: Existing measurement system needs further support and refinement.
Status: The Office of Public Safety, Alcoholic Beverage Control Board (ABC) has information on local alcohol laws and controls (e.g. licenses, sales and local option restrictions). The current and available data on social norms and attitudes of drug and alcohol use in Alaska, is collected through the *National* Surveys on Drug Use and Health. Recommendation: The statistics from the ABC board needs to be reviewed to identify if there is enough data to compile a statewide indicator related to alcohol control laws. The data from the National Surveys on Drug Use & Health need to be reviewed for its strength as a population-based Alaska indicator.

Loss of Cultural Identity (Protective Factor: Cultural Identity) - Alaska Native and American Indian people may face additional risks associated with alcohol and other drug use. The increased vulnerability may be due to marginalization, stigmatization, and loss or devaluation of language, culture, spiritual and traditional healing practices, and subsistence living. Another problem may be lack of access to culturally appropriate health care. Alaska Native and American Indian communities also experience higher levels of stress due to historical trauma and rapid cultural change. Other ethnic persons or groups may experience similar risk factors. [14,16,19,21]
Indicator: Developmental Stage I: Indicator needs to be defined and measurement system put into place.
Status: Information related to cultural identity such as percentage of Native language speakers and the number of rural households practicing subsistence lifestyles, exists primarily at the regional or local level. There are several ongoing research projects exploring the factors related to loss or preservation of cultural identity in Alaska. This research can assist in the development of stronger measures that may form the basis for future population-based and program-based indicators. Recommendation: The current indicators will require further analysis and represent only two elements of preservation or loss of cultural identity. The subcommittee urges the state to partner with interested organizations to further define cultural identity and develop indicators

Risk & Protective Factor/Indicator Citations

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Alaska Influence Indicator Data Sources

- Child Abuse Rate 2007 – Calculated by the Office of Children's Services, ORCA investigation for SFY07.
- School Climate and Connectedness Survey 2007. Association of Alaska School Boards (AASB).
- Suicide Rate (2000-2004) - Calculated by the Alaska Bureau of Vital Statistics (BVS), February 2007.
- Youth Risk Behavior Survey 2007. Department of Education and Early Childhood and Development (DEED) and Department of Health and Social Services (DHSS).